

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P962398

Luminaire Tested: **NAV-SB2C-727-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-727-U-T2R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12056.1 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

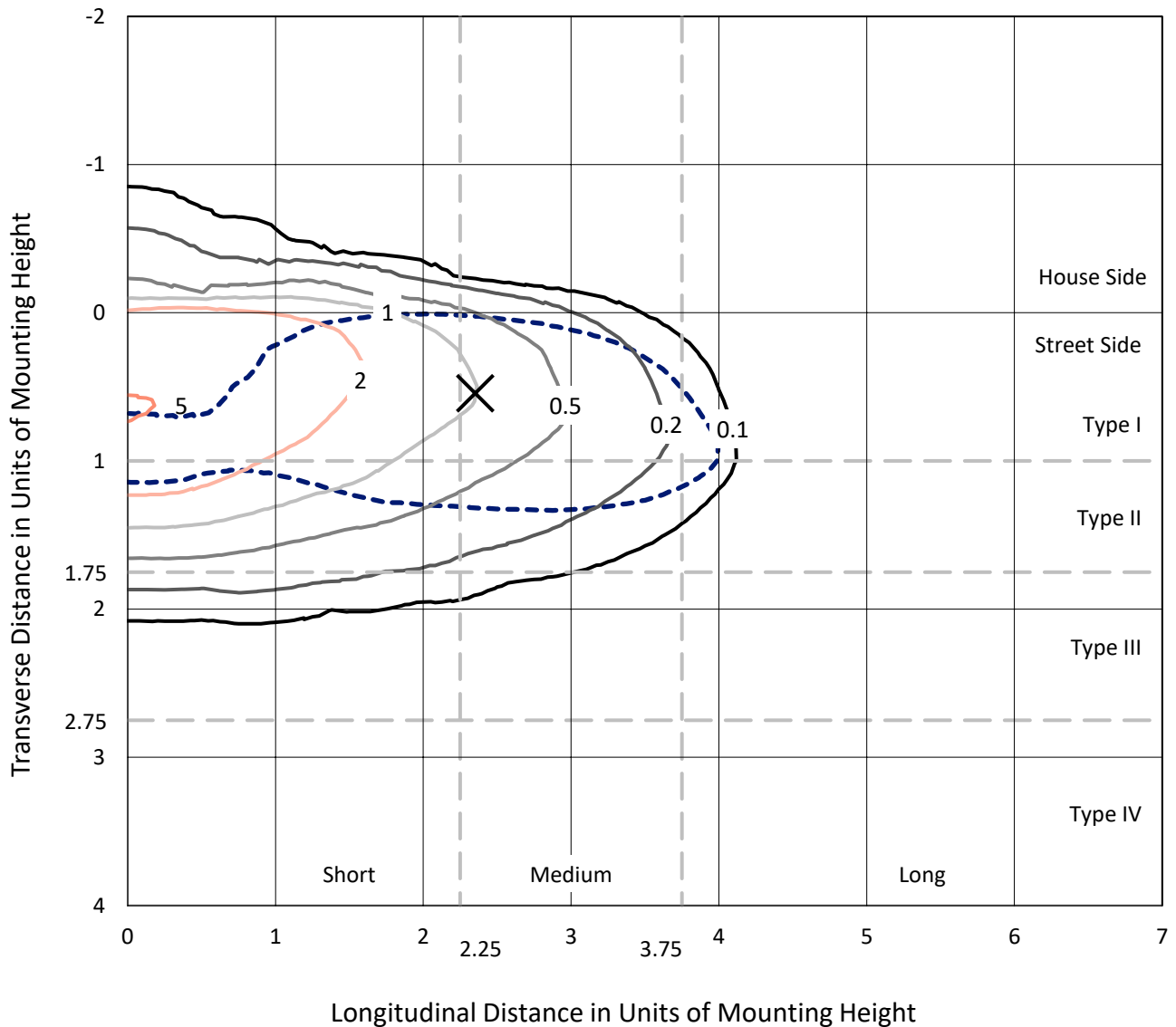
Input Watts (W): 100.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

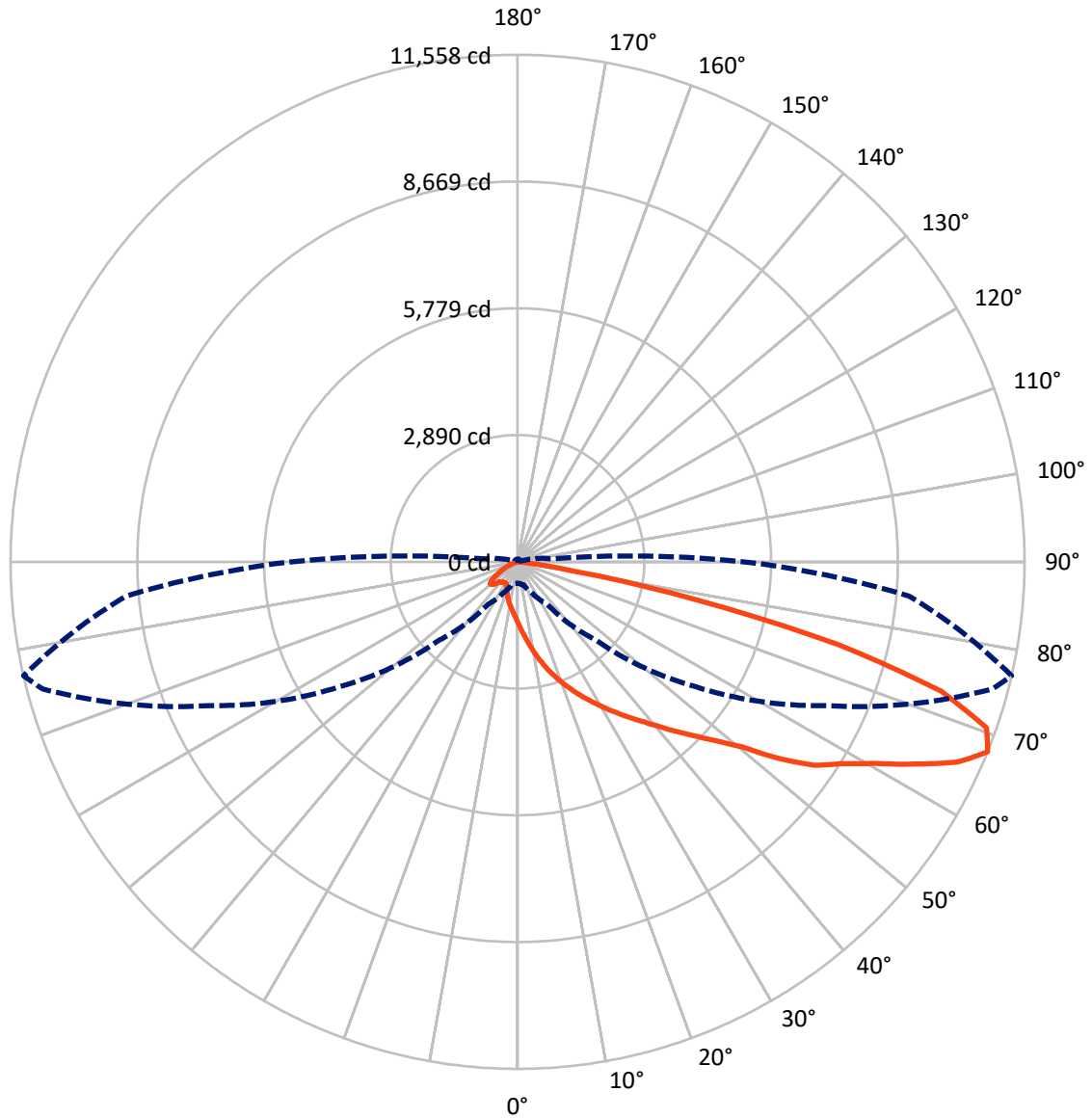
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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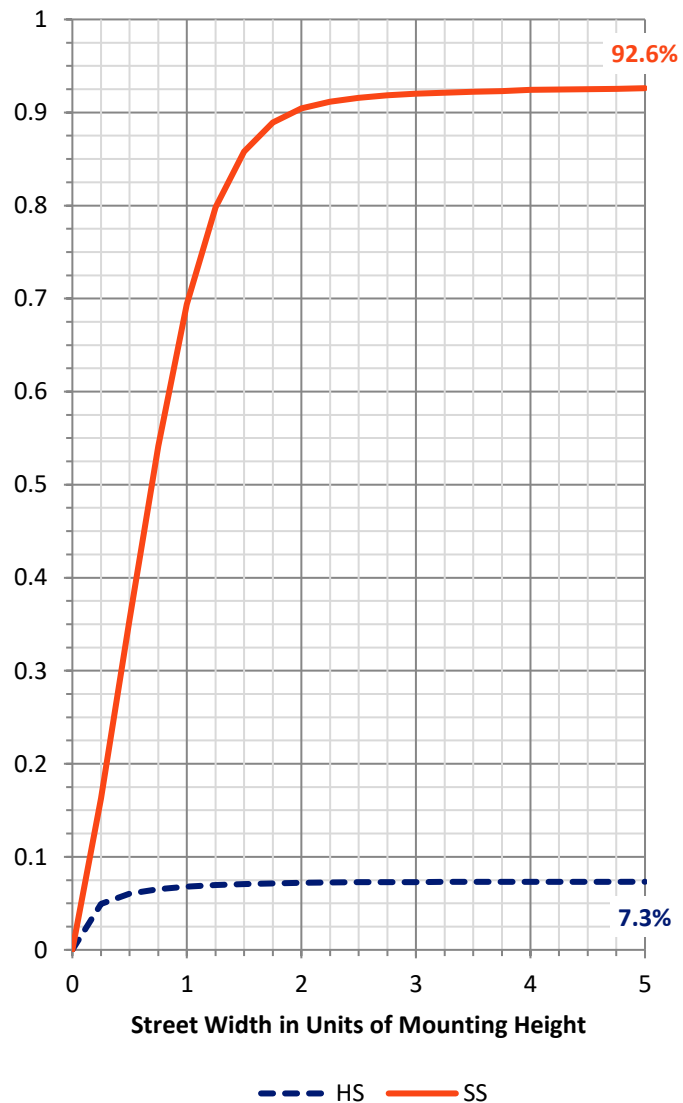
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	887.0	0.0	887.0
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	11169.1	0.0	11169.1
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	12056.1	0.0	12056.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.9	1.2
10°-20°	496.9	4.1
20°-30°	958.9	8.0
30°-40°	1664.7	13.8
40°-50°	2417.0	20.0
50°-60°	2775.7	23.0
60°-70°	2409.8	20.0
70°-80°	1135.0	9.4
80°-90°	56.1	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	12056.1	100.0
0°-180°	12056.1	100.0

**Coefficient of Utilization**

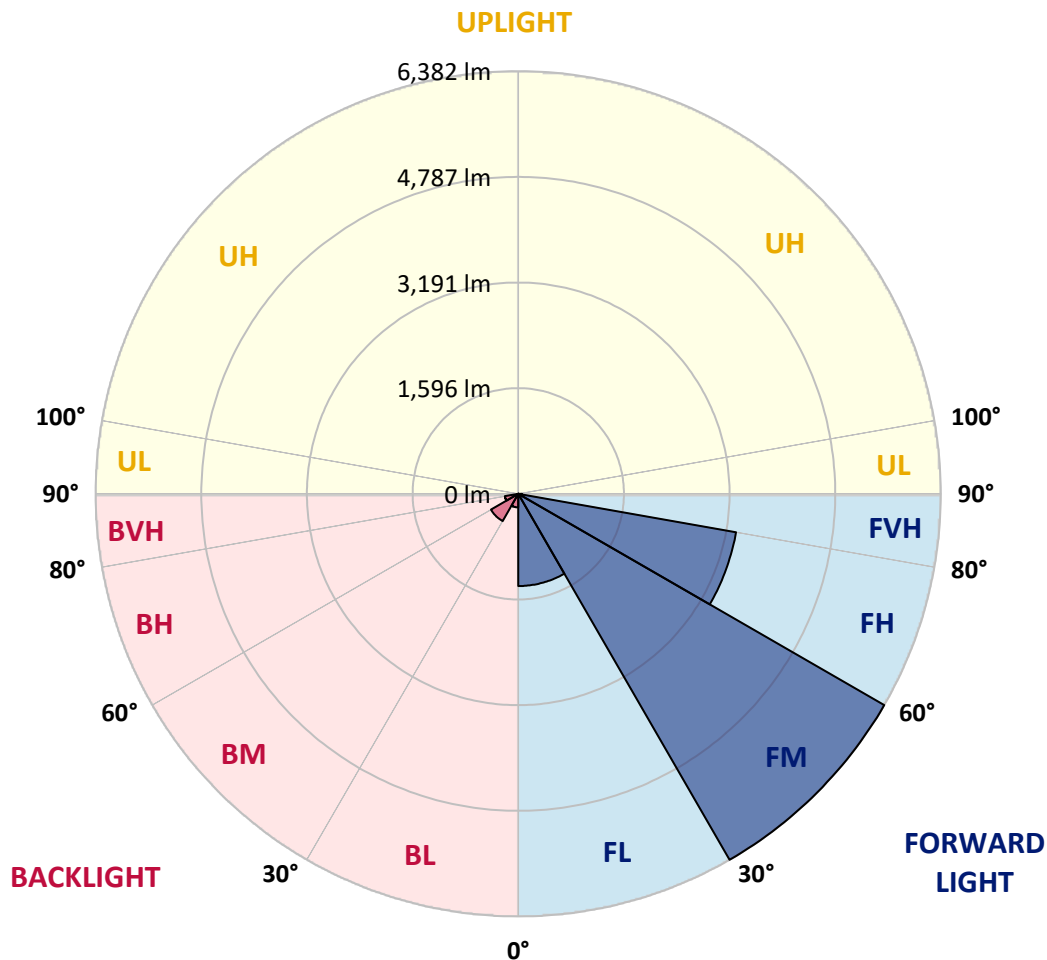


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1392.3	11.5			
FM (30°-60°)	6382.1	52.9			
FH (60°-80°)	3339.5	27.7			G2/5000
FVH (80°-90°)	55.1	0.5			G1/100
BL (0°-30°)	205.3	1.7	B1/500		
BM (30°-60°)	475.2	3.9	B1/1000		
BH (60°-80°)	205.3	1.7	B1/500		G1/500
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2
2.5°	1924.7	1936.7	1919.5	1886.6	1837.2	1805.0	1726.4	1652.3	1569.9	1543.8	1461.3
5°	2346.2	2356.8	2337.3	2301.3	2235.4	2172.6	2069.3	1914.3	1753.4	1701.7	1555.6
7.5°	2658.4	2664.5	2656.9	2624.0	2561.2	2490.0	2374.7	2191.2	1952.5	1895.5	1671.8
10°	2883.0	2902.5	2900.2	2887.5	2845.6	2788.0	2665.2	2456.3	2175.6	2102.2	1802.8
12.5°	3032.1	3053.8	3066.5	3094.9	3092.6	3055.9	2948.2	2727.3	2397.9	2311.8	1950.3
15°	3075.4	3098.7	3147.4	3213.2	3271.6	3290.4	3214.7	2993.1	2642.8	2532.7	2101.5
17.5°	3050.7	3086.7	3145.1	3249.1	3377.2	3461.7	3453.5	3249.9	2865.1	2739.3	2249.7
20°	3105.4	3139.8	3185.5	3273.1	3422.1	3575.5	3636.9	3495.5	3086.0	2954.2	2405.4
22.5°	3407.8	3401.9	3406.4	3420.5	3509.7	3661.6	3788.2	3718.5	3304.5	3169.8	2570.1
25°	3887.0	3860.0	3814.3	3737.3	3714.8	3788.2	3919.9	3916.2	3535.1	3390.6	2738.6
27.5°	4436.5	4432.0	4325.0	4139.3	4034.5	4006.0	4068.9	4108.6	3763.5	3609.2	2907.7
30°	4962.7	4974.7	4830.3	4623.7	4431.3	4319.7	4262.8	4291.3	3995.6	3845.1	3082.2
32.5°	5420.9	5433.7	5276.5	5034.7	4796.6	4661.8	4542.1	4471.7	4248.6	4084.6	3273.8
35°	5808.1	5820.8	5640.3	5373.0	5119.3	4997.2	4861.7	4669.3	4503.1	4350.4	3487.2
37.5°	6153.9	6150.1	5908.3	5638.8	5389.6	5292.9	5221.9	4912.6	4765.1	4617.6	3723.8
40°	6358.3	6374.0	6167.3	5870.2	5628.4	5558.0	5553.4	5214.4	5067.6	4924.6	3982.8
42.5°	6418.1	6445.8	6296.2	6052.1	5832.8	5756.4	5873.9	5540.7	5419.5	5280.2	4275.5
45°	6310.3	6337.3	6269.2	6100.0	5972.0	5922.6	6149.4	5879.1	5795.2	5657.5	4605.7
47.5°	5995.9	6029.6	6046.1	6010.2	6008.7	6058.8	6396.4	6235.5	6241.4	6100.7	4988.3
50°	5387.3	5444.2	5595.4	5722.7	5919.6	6166.6	6636.8	6621.8	6744.6	6623.2	5486.8
52.5°	4280.8	4361.6	4882.7	5230.8	5673.3	6146.4	6901.0	7241.6	7627.2	7449.8	6189.9
55°	3440.0	3440.0	3863.7	4515.1	5192.6	6013.2	7016.3	7644.4	8228.4	8186.5	6684.6
57.5°	2804.4	2838.1	3108.4	3684.1	4497.1	5695.7	7087.5	7897.5	8712.8	8682.1	7168.3
60°	1730.9	1803.5	2314.0	2882.3	3705.8	5130.5	7042.6	8153.6	9300.4	9325.1	7750.7
62.5°	974.8	1001.7	1229.3	2073.8	2881.6	4370.6	6698.9	8296.6	10052.1	10156.9	8351.2
65°	673.0	686.5	774.1	1290.7	1997.4	3479.7	6027.4	8207.4	10805.2	11017.1	8860.2
67.5°	488.8	495.6	550.2	788.3	1185.1	2522.9	4974.7	7758.2	11204.3	11558.4	8957.6
70°	375.9	380.3	419.9	518.0	700.0	1557.2	3613.0	6865.1	10915.3	11338.2	8459.0
72.5°	305.4	310.0	340.6	383.3	464.1	920.9	2189.8	5575.2	9639.6	10096.2	7201.2
75°	257.6	263.5	291.2	318.9	363.9	591.4	1027.2	3882.5	7249.2	7548.6	5007.7
77.5°	143.0	131.7	236.6	264.2	307.0	374.3	480.6	2284.8	4059.9	4143.0	2222.0
80°	89.1	92.0	187.9	212.6	235.9	188.7	220.1	879.7	1407.4	1337.1	430.5
82.5°	5.2	12.0	144.5	153.4	161.7	80.9	83.1	298.7	339.2	311.4	76.4
85°	0.0	0.0	65.9	53.2	56.2	23.2	24.0	69.6	45.7	49.4	15.0
87.5°	0.0	0.0	0.0	1.5	0.0	2.3	4.5	5.9	2.3	3.0	5.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2	1390.2
2.5°	1409.0	1356.6	1250.2	1146.2	1061.6	983.0	926.8	873.7	846.8	845.2	843.7
5°	1451.6	1341.6	1128.9	941.1	789.9	668.5	589.9	533.8	505.3	495.6	494.2
7.5°	1511.6	1346.0	1022.6	761.4	583.2	479.1	434.2	416.3	410.3	403.5	402.0
10°	1587.1	1356.6	927.6	613.2	459.7	407.2	389.3	381.8	377.3	372.8	371.4
12.5°	1671.8	1366.3	833.2	509.1	404.3	377.3	364.6	355.6	349.6	344.4	342.9
15°	1754.1	1372.3	735.1	436.4	375.9	354.1	340.6	330.9	322.7	316.7	315.9
17.5°	1835.7	1380.5	643.1	393.1	352.6	330.9	317.4	305.4	298.7	292.0	291.2
20°	1926.3	1379.0	556.3	362.3	329.4	307.7	293.5	282.3	275.5	268.0	267.2
22.5°	2010.1	1371.6	479.9	336.1	305.4	284.4	268.8	257.6	250.8	244.8	244.1
25°	2106.7	1365.5	416.3	312.2	283.0	262.0	244.8	234.3	226.8	221.6	220.9
27.5°	2199.5	1356.6	369.8	290.5	261.3	241.1	224.6	212.6	205.9	202.1	202.1
30°	2290.9	1354.3	352.6	269.5	241.8	221.6	205.1	193.9	188.7	187.2	186.4
32.5°	2401.0	1360.3	360.1	262.0	223.9	203.7	187.9	179.7	174.5	174.5	174.5
35°	2518.4	1358.8	371.4	268.8	211.9	185.6	173.7	168.4	163.2	163.2	163.2
37.5°	2665.9	1361.0	380.3	280.0	207.4	170.7	164.0	157.2	154.3	154.3	154.3
40°	2886.0	1435.2	375.9	289.8	205.9	160.2	146.8	144.5	142.3	142.3	142.3
42.5°	3155.6	1596.1	381.8	290.5	205.1	152.7	134.8	139.3	134.0	133.2	132.5
45°	3450.6	1772.0	419.9	274.8	204.4	148.9	128.7	134.0	125.8	125.8	125.8
47.5°	3743.2	1946.5	458.9	252.3	202.1	148.2	123.5	120.5	118.3	119.0	119.0
50°	4146.7	2088.7	473.9	221.6	196.9	146.8	113.8	114.5	113.1	114.5	114.5
52.5°	4586.3	2118.7	455.9	187.2	181.9	142.3	107.0	110.1	109.3	110.8	110.8
55°	4860.2	2086.5	376.6	155.7	158.7	124.2	100.3	106.3	106.3	106.3	106.3
57.5°	5143.2	1949.4	267.2	126.5	131.7	101.8	94.3	102.6	101.8	101.1	101.1
60°	5346.8	1727.8	175.9	104.0	104.9	83.8	87.6	96.6	95.8	92.0	92.0
62.5°	5498.8	1483.1	113.1	88.4	80.2	75.6	80.2	87.6	84.6	76.4	74.8
65°	5481.6	1143.9	86.8	75.6	65.9	65.9	69.6	76.4	67.3	53.9	52.4
67.5°	5161.9	774.1	71.9	63.7	55.4	54.6	57.6	63.7	57.6	45.7	44.2
70°	4590.7	506.0	57.6	49.4	44.2	40.4	46.4	54.6	48.7	36.7	35.2
72.5°	3726.0	308.4	43.5	36.0	32.2	26.2	36.7	44.9	38.9	27.0	25.4
75°	2410.7	157.2	29.9	23.2	17.2	15.7	27.0	33.7	27.0	16.5	14.2
77.5°	922.3	65.9	16.5	10.5	9.0	7.5	15.0	20.2	11.3	3.8	3.0
80°	177.4	27.7	8.2	5.2	4.5	3.0	2.3	1.5	0.0	0.0	0.0
82.5°	30.6	9.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)